

II. Remarks

The Examiner is requested to reconsider the application in view of the foregoing amendment and the following remarks. It is believed that no new matter has been added.

Respectfully, and generally for the reasons set forth below, the objections and rejections and each ground therefor are traversed to the extent that they are not rendered moot by the foregoing amendment.

Applicant wishes to express appreciation for the Examiner's interview, which is greatly appreciated. During the interview, Applicant requested that action be taken on the Petition filed via a mailing on July 20, 2004.

With respect to the Office Action, the Examiner has confirmed a restriction requirement, and Applicant confirms that an election was made with traverse for Group 1. More particularly, the restriction requirement is believed to be improper, and reconsideration is requested.

First, pursuant to 35 U.S.C. Sec. 132, if the restriction is maintained, Applicant respectfully requests PTO compliance with 35 U.S.C. Sec. 132, i.e., "the reasons for such requirement ... *together with such information as may be useful in judging the propriety of continuing prosecution...*". The Examiner contends in the restriction requirement that "Invention I can be made by a subtraction methods such as etching away a blank to form a conductive layer instead of the step of building up the conductive layer." Applicant neither admits nor denies the contention, but requires that degree of proof of the fact that is the Examiner's burden to provide, e.g., pursuant to Sec. 132. Failing *any* proof of the factual basis for the Examiner's contention in the restriction requirement, the restriction requirement is improper.

Second, the restriction requirement is improper because Examiner has not shown that claims are independent and distinct and have separate utility. See, e.g., MPEP Sec. 802.

Third, even if they can be shown to be separate and distinct, there is “a serious burden on the Examiner if restriction is required (see MPEP Section 803.02, Section 806.04(a) - Section 806.04(i), Section 808.01(a), and Section 808.02).” And pursuant to GUIDELINES found there, “examiners must provide reasons and/or examples to support conclusions.” The Examiner has not provided sufficient any “reasons and/or examples to support conclusions” as required by the MPEP.

The Sec. 132 information and reasons, the MPEP “reasons and/or examples to support conclusions,” and reconsideration are therefore respectfully requested. In the absence thereof, the restriction requirement is improper.

In Paragraphs 6 of the Office Action, the Examiner has objected to reference characters in the specification. The foregoing amendment to the specification has changed the wording.

In Paragraphs 6-7 of the Office Action, the Examiner has required correction of the drawings. The objection is respectfully traversed because the objection is premised on the absence of a PTO decision on the Petition to Accept Color Drawings filed by mail on 20 July 2004. Further, on June 30th, corrected color drawings were submitted. Action on the Petition is respectfully requested, and from the interview, Applicant understands that the instant objection will be held while the PTO acts on the Petition.

In paragraph 8 of the Office Action, the Examiner has objected to wording at page 8, line 19, of the specification. The foregoing amendment to the specification has changed the wording.

In paragraph 9 of the Office Action, the Examiner has objected to wording of claims 96, 101, 107, 118, 124, 127, 131-133, and 136. These claims have been amended such that the objection is moot.

In Paragraph 11, claims 91-137, 144-45, 158-159, and 172-173 have been

rejected pursuant to 35 U.S.C. Sec. 102(b). The Examiner contends that the claims are anticipated by U.S. Patent No. 5,517,758 (Nakamura).

During the interview, the Examiner's attention was drawn to the "means for" language of claim 119 and 35 U.S.C. 112, sixth paragraph, which states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure described in the specification and equivalents thereof." The structure in Applicant's "means for" claims is not the same structure disclosed in Nakamura, and thus statutory anticipation has not been shown for Applicant's "means for" independent claims 120, 125, 134, and 136, as well as those claims depending therefrom. See also In re Donaldson and MPEP Sec. 2181, etc.

With regard to other Sec. 102-rejected claims, statutory anticipation has not been shown at least because Nakamura does not teach the following elements for the claims listed below:

91: some of the cavities are obtuse with respect to the top surface and are at least 1 tenth of a mil deep.

97: a sample of the circuitry has at least 20% of the teeth being at least 1 tenth of a mil deep.

102: the conductive layer is comprised of teeth, and a sample of the circuitry has at least 5,000 of the teeth per linear inch.

108: some of the undercuttings being obtuse to the surface and at least 1.5 tenths of a mil deep.

110: a surface gloss measurement at an angle of 60 degrees of less than 10%.

115: a sample of the circuitry has at least 20% of the teeth that are within the range of 1 tenth of a mil deep to 2 tenths of a mil deep.

122: a sample of the circuitry has at least 20% of the teeth that are within the range of 1 tenth of a mil deep to 2 tenths of a mil deep.

127: separation requires destroying integrity of the conductive layer and of the dielectric material.

129: a dielectric material having a surface gloss measurement at an angle of 60 degrees of less than 10%.

Particular attention is drawn to the Examiner's contentions regarding surface gloss measurement. Applicant believes that this measurement cannot be determined from Nakamura, and the Examiner's citations to Nakamura do not pertain to such requirements. See claim 129. The same is true for the contentions regarding whether separation requires destroying integrity of the conductive layer and of the dielectric material. See claim 127. For example, would separation destroy the integrity of the dielectric material, the conductive layer, or both? Nakamura says nothing about any of this. If the rejection regarding these issues is maintained, Sec. 132 reasons and information are required.

Turning now to the claims rejected pursuant to 35 USC Sec. 103, the contentions concerning the obviousness rejection build on the reasoning of the Sec. 102

rejection, and because the above-mentioned claim requirements have not been shown in the cited art, no combination can show that they were known prior to Applicant's invention.

Particular attention is drawn to the Examiner's contentions regarding claims 138-143. The Examiner has not shown that Nakamura teaches a means for attaining these claim requirements. Without this evidence, the Examiner has insufficient evidence for contending that such requirements could be deemed "optimal" or "within the ordinary skill in the art" at the time of Applicant's invention. Similarly, the Examiner has not established that it would have been possible "to have a teaching of Larson employ the device of Nakamura." Respectfully, these contentions are mere pie in the sky without any prior art evidence showing that the claim requirements could have been attained in the manner contended by the Examiner. If the contentions are maintained, again Sec. 132 reasons and information is required.

Finally, the Examiner has not met the PTO burden of proof that an alteration or modification of Nakamura to reach the claimed invention would be proper because:

- (1) The alteration would change the principles of operation of Nakamura.
- (2) The alteration would contradict Nakamura.
- (3) There was no evidence of motivation or suggestion, as of the priority date of the instant application, that would have prompted one skilled in the art to make such an alteration of Nakamura to reach the claimed invention.

With regard to (1-3), the Examiner's attention is drawn to Nakamura, e.g., at Col. 5, lines 14-15, wherein Nakamura teaches that "the shape of the insulating resin layer 2 reflects the shape of the abrasives 1" and further teaches away from the invention at Col. 6, lines 11 "the chemical etching followed by the dry sandblasting...."

With regard to (1-3), the Examiner's attention is drawn to Nakamura's teaching of a multiple desmear process at Col. 6, line 8, and to the MLB Sheets filed in the parent case as evidence of unobviousness. (The Examiner is reminded to check the files of the prior

applications for cited information, and duplicate copies are provided herewith for the convenience of the Examiner). These Sheets are believed to pertain to the desmear process and illustrate an embodiment that departs therefrom. The Examiner is requested to contrast the specification page 17, lines 10-17, with the Sheet specifications concerning respective times to note a process difference with respect to the particular embodiment discussed therein. To the degree that a product is a reflection of the process that made it, the Examiner has not shown (1-3 above) how Nakamura would have led one to Applicant's claimed invention. See, e.g., the color photographs filed herein. In particular view of the foregoing, pursuant to 35 U.S.C. Sec. 132, the Examiner's reasons and information are required regarding 1-3 above.

In sum, the situation regarding claim 119 is believed to be instructive because the structure in Applicant's "means for" claims is not the same structure disclosed in Nakamura. Flowing from this kind of structural distinction, statutory anticipation and obviousness contentions have not captured the invention claimed herein.

Accordingly, withdrawal of the rejection and allowance of the claims are respectfully requested, and again action on the Petition and reconsideration of the Restriction Requirement are also requested.

III. FEE

The Commissioner is hereby authorized to charge any fees associated with the above-identified patent application or credit any overcharges to Deposit Account No. 50-0235. Additionally, the Examiner is invited to contact the undersigned at (312) 240-0824 if it can in any way expedite or ease the handling of this case. Please direct all correspondence to the undersigned at the address given below.

Respectfully submitted,



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